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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/384,380	08/27/1999	MICHIHISA TASAKA	0234-0370P	7724

2292 7590 12/24/2002

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EXAMINER

LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 12/24/2002

/6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/384,380

Applicant(s)

TASAKA ET AL.

Examiner

Rip A. Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 21, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action follows a request for continued examination (RCE). Claims 1, 5, 10, 11, 12, 13, and 14 have been amended to include the limitation that component (c) is prepared in the presence of a single site catalyst. Claim 9 was canceled. The Applicants have submitted a declaration showing the relevance of said limitation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. Claims 1-3, 5-7, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,433,062 to Tasaka *et al.* in view of U.S. Patent No. 5,221,781 to Aida *et al.*

Tasaka *et al.* teaches a composition comprising: (a) 100 parts (by weight) of a block copolymer consisting of at least two polymeric blocks (A) composed mainly of a vinyl aromatic compound and at least one polymeric block (B) composed mainly of a conjugated diene compound, and/or a hydrogenated block copolymer obtained by hydrogenating said block copolymer, (b) 40-240 parts of a non-aromatic softening agent for rubber, (c) 5-300 parts of a copolymer composed mainly of ethylene, and (d) 5-60 parts of polypropylene or a copolymer composed mainly of polypropylene (claim 1). In particular, the ethylene copolymer is prepared using a single site catalyst (col. 5, line 31), and particularly preferable substances have a density of less than 0.90 g/cm^3 (col. 5, line 44). The comonomer is an α -olefin as shown in col. 5, lines 39-47. The composition also contains up to 100 parts of inorganic filler (col. 3, line 29, claim 8). Magnesium hydroxide filler is recited specifically in col. 7, line 37. Organic peroxide is included in the composition in an amount of 0.1-1.5 parts by weight (col. 2, line 55), as is a crosslinking aid in an amount of 0.1 to 3.5 parts by weight (col. 2, line 57). Examples of crosslinking agent are the series of ethyleneglycol methacrylates (col. 8, lines 25-27). The reference does not teach use of coupling agents.

The practice of using coupling agents to facilitate homogeneous dispersion of inorganic components in a polymer resin is well established in the art. In fact, Aida *et al.* prescribe surface treatment of fillers such as magnesium hydroxide with silane coupling agents in order to improve dispersibility. Having read this article, one having ordinary skill in the art would have found it

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obvious to use coupling agents as per Aida *et al.* in the composition of Tasaka *et al.* in order to attain a uniformly dispersed composition. The expectation that such an embodiment would work successfully provides the requisite motivation to combine the teachings of the references. *In re O'Farrell*, 7 USPQ 2d 1673 (Fed. Cir. 1988).

Tasaka *et al.* also teach a process of melt kneading to form the compositions of the invention (claims 1 and 4). Thus, one having ordinary skill in the art would have found it obvious to prepare a composition containing filler surface treated with coupling agent by melt-kneading as well. Also, it would have been obvious to one having ordinary skill in the art to prepare molded articles because Tasaka *et al.* show that molded articles can be prepared from the compositions described therein (col. 11, line 15).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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December 19, 2002



DAVID W. WU
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